#### Northern Everglades & Estuaries Protection Program

### **Rivers Watershed Protection Plans**

Temperince Morgan

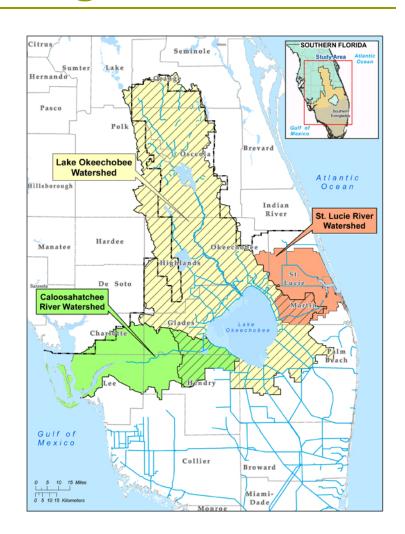
Governing Board Strategic Planning Meeting

March 12, 2009



## Northern Everglades and Estuaries 2007 Legislation

- Required development of Caloosahatchee and St. Lucie River Watershed Protection Plans
  - Identify water quality and storage projects
  - □ Due by Jan 1, 2009
- Included requirements for-
  - Annual Reports
  - Triennial Plan Updates





### River Watershed Protection Plan-Objectives

- Nutrient load reductions to achieve adopted Total Maximum Daily Loads
- Reduce frequency and duration of undesirable salinity ranges in estuary, while meeting other waterrelated needs of the region



### River Watershed Protection Plan - Elements

- Watershed Pollutant Control Program
- Watershed Construction Project
- Watershed Research and Water Quality Monitoring Program



## **Preferred Plan Summary**

St. Lucie Preferred Plan	Caloosahatchee Preferred Plan	
Indian River Lagoon-South Project	C-43 West Reservoir	
BMPS/Regulatory Programs	BMPs/Regulatory Programs	
Additional regional phosphorus	Additional storage	
<ul> <li>treatment in C-23/24 basin</li> <li>Local quality/quantity projects (e.g., stormwater retrofits; septic conversions; Alternative Water Storage Facilities)</li> </ul>	<ul> <li>Regional water quality projects- emphasis on nitrogen</li> </ul>	
	Local quality/quantity projects (e.g., stormwater retrofits; septic conversions- Lehigh, Cape Coral; Alternative Water Storage Facilities)	
	Additional watershed monitoring in watershed	
Summary	Summary	
• ~200,000 ac-ft/yr storage (IRL and Ten	• ~400,000 ac-ft/yr storage (including	
Mile Creek)	C-43 West Reservoir)	
Nutrient treatment- primarily	Nutrient treatment- primarily nitrogen	
phosphorus treatment	treatment	

### Plan Implementation Strategy

- Multiple Phases
  - □ Phase I projects initiated 2009-2012
  - □ Phase II projects initiated 2013-2018
  - Long Term Implementation Phase projects initiated beyond 2018

# Caloosahatchee Plan - Phase I (2009-2012)

		Initiated	Completed
Construction Project	Powell Creek Algal Turf Scrubber		<b>②</b>
	Alternative Water Storage Facilities- Barron Water Control District		<b>Ø</b>
	Caloosahatchee Area Lakes Restoration (Lake Hicpochee)	<b>Ø</b>	
	C-43 Water Quality Treatment Demonstration Project (BOMA)	<b>②</b>	
	Spanish Creek/Four Corners Environmental Restoration Phase I	<b>②</b>	
	C-43 West Reservoir	<b>②</b>	
	Local-Stormwater Projects (e.g., treatment wetlands, conveyance and structural improvements, and stormwater recovery projects)	<b>⊘</b>	<b>⊘</b>
	Florida Ranchlands and Environmental Services Projects	<b>Ø</b>	
	Farm and Ranchland Protection Program	<b>(</b>	

# **St. Lucie Plan - Phase I (2009-2012)**

		Initiated	Completed
Construction Project	Alternative Water Storage Facilities- Indiantown Citrus Growers Association Phase I and II		<b>Ø</b>
	Florida Ranchlands and Environmental Services Projects (Alderman-Deloney complete)	<b>Ø</b>	<b>Ø</b>
	CERP-IRL South: C-44 Reservoir/STA		
	CERP-IRL South: Allapattah Complex- Natural Storage and Water Quality Area	<b>②</b>	
	Alternative Water Storage Facilities-Indiantown Citrus Growers Association- Phase III, Dupuis, Waste Management St Lucie Site, Caulkins	<b>⊘</b>	
	Hybrid Wetland Treatment Technology Pilot Project		
	Local-Stormwater Projects (e.g., retention/detention ponds, treatment wetlands, conveyance and structural improvements)	<b>②</b>	<b>⊘</b>
	Local-Wastewater Projects (e.g., sludge disposal management, sewage treatment and disposal systems)		<b>Ø</b>
	Local- Habitat Restoration (e.g., muck removal, oyster balls)		<b>~</b>
	Florida Ranchlands and Environmental Services Projects	<b></b>	
	Farm and Ranchland Protection Program	<b>Ø</b>	

#### **Plans Submittal and Ratification**

- Final Plans submitted to the Legislature on Jan 1, 2009
- If the Legislature takes no action on the plans during the 2009 legislative session, the plans are deemed approved and may be implemented
- The River Watershed Protection Plans will provide the basis for FDEP's Basin Management Action Plan development

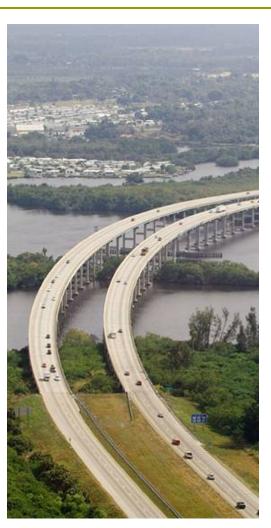
## **Ongoing Projects**

- C-43 Water Quality Treatment and Testing Facility
- Spanish Creek/Four Corners Phase I
- Powell Creek Algal Turf Scrubber
- 5/5/5 Projects with Martin County
- Hybrid Wetland Treatment Technology Pilot Projects
- Alternative Water Storage
   Projects/Florida Ranchlands and Environmental Services Projects

### **Emerging Issues**

- Freshwater and Estuarine Total Maximum Daily Loads (TMDLs) and associated Basin Management Action Plans (BMAPs)
- Nitrogen treatment technologies

**Questions?** 



#### SOUTH FLORIDA WATER MANAGEMENT DISTRICT

